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ABSTRACT

In December 1989, the School District of Philadelphia (Pennsylvania) and Research for Better Schools, Inc., with the support of the State Department of Education, initiated a collaborative 2-year study of the district's Chapter 1 schoolwide projects. This report presents findings from the study of McMichael Elementary School (kindergarten through grade 8), one of the schoolwide projects initiated in 1988. Section I of this report describes what it means to be involved in a schoolwide project, based on interviews of principal and staff, and observations of staff meetings. Section II presents an overview of current instructional practice as observed in a 2-day site visit to eight classrooms by a team of Chapter 1 educators. Section III describes the instruction that three McMichael students received on April 24. Section IV shares reflections of evaluators about the program. The evaluation demonstrates many improvements made in the instructional practices and organization of the McMichael school, as well as the commitment of the staff to continuing improvement. There are 11 tables of study data. Three appendices outline the daily schedules of the students observed. (SLD)

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AN EXPLORATORY STUDY OF A CHAPTER 1 SCHOOLWIDE PROJECT AND CURRENT INSTRUCTIONAL PRACTICE

McMichael Elementary School
School District of Philadelphia

by

Research for Better Schools, Inc.

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McMichael Elementary School

School District of Philadelphia

Research for Better Schools, Inc.
444 North Third Street
Philadelphia, PA 19123

June 30, 1990

RBS is funded by the U.S. Department of Education to be the Mid-Atlantic Regional Educational Laboratory, serving Pennsylvania, Maryland, Delaware, New Jersey, and the District of Columbia. As one of nine federally-supported regional educational laboratories, RBS's mission for the past 23 years has been to collaborate with state, intermediate, and local educational agencies to improve district, school, and classroom practice. RBS is a non-profit corporation, governed by a Board of Directors made up of educational and community leaders from its region.

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Susan Austin, Richard McCann,
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INTRODUCTION

In December 1989, the School District of Philadelphia and Research for Better Schools, with the support of the Pennsylvania Department of Education, agreed to initiate a collaborative two-year study of the district's Chapter 1 schoolwide projects. As the first phase of the study, it was agreed that RBS would undertake an in-depth study of four schoolwide projects, in order to delve into the complexities of individual school practice. This report presents the findings of RBS's study of McMichael Elementary School, one of the schoolwide projects initiated in 1988.

This report's primary purpose is to provide McMichael's staff with a description of current practice in their school, a description that may help them further focus the improvement activities that are under way. The report will also inform an analysis of the commonalties and differences across the four schools participating in this study.

The report is written in a style and format to support the efforts of McMichael's staff to improve their performance as a school. The report is primarily descriptive; it reflects as accurately as possible what RBS staff, along with those who helped them, heard and saw. The report keeps before the reader the methods used to collect the information in order to discourage over-generalizing the findings. The findings are presented in reference to specific topics or questions. At the end of each set of findings, discussion questions are provided to help the reader process the information; and suggest a focus for further study. In general, the report encourages the reader to consider these general questions:

- To what extent are the descriptions of practice at McMichael accurate and generalizable?
- To what extent do the descriptions suggest practices in need of further study and/or action?

The report is organized into four sections, reflecting the principal purposes of the study.

- Section I, McMichael Elementary School as a Schoolwide Project, describes what it means to be a schoolwide project, as could be gleaned from interviews of McMichael's principals and staff and from RBS staff's observations of a number of staff meetings.
- Section II, Instructional Practice at McMichael Elementary School -- A Snapshot, presents an overview of current instructional practice at McMichael, as seen during the course of a two-day visit by a team, composed of Chapter 1 educators.
- Section III, Instructional Practice from the Perspective of a Day in the Life of Three McMichael Students, describes the instruction that three McMichael students experienced on April 24, as recorded by the three RBS staff who shadowed those students for that day.

- Section IV, Some Concluding Thoughts, shares some RBS staff reflections on information presented in this report.

SECTION I

MCMICHAEL ELEMENTARY SCHOOL AS A SCHOOLWIDE PROJECT

The first task of the study was to collect information from school staff on what it has meant to be a Chapter 1 schoolwide project. That information was also used to suggest how the school was implementing major components of the district's schoolwide design.

This section presents a summary of what RBS staff saw and heard about McMichael Elementary School as a schoolwide project. This summary is organized into seven parts. The first describes the components of a schoolwide project, as described by School District of Philadelphia's Central Office staff, and the study methods. The second is a brief description of the school, its staff, students, and community. The third highlights some of the recent history of the school. The fourth describes the current mission and goals of the school. The fifth provides an overview of the current organization of the school, with emphasis on the new staff groups and roles that have developed as a result of McMichael's schoolwide project. The sixth discusses the strategies and activities that McMichael has undertaken to improve its performance. The last summarizes staff perceptions of what it means to be a schoolwide project.

Components of A Schoolwide Project and Study Methods

Central Office staff helped RBS staff understand the major components of the schoolwide design and to differentiate those components from other district initiatives that were affecting the schools. Specifically, Central Office staff identified the following components:

- the emphasis on improving student attendance and student achievement, and in support of these outcomes, increasing parent involvement
- the creation of new groups (e.g., the leadership group) and new staff roles (e.g., program support teacher, instructional support teacher) responsible for developing and updating plans for affecting practice in ways that improved performance, budgeting Chapter 1 and other resources to support the implementation of those plans, and leading the effort to implement specific changes in practice
- the required use of a systematic, data-based planning/problem solving process to develop and update their improvement plans
- the selection and implementation of an instructional model, with staff development activities to support its model implementation
- the use of detailed student progress records to monitor student progress and to identify students with specific needs
- the establishment of a pupil support committee to help staff address more effectively students with special needs.

The Central Office staff emphasized that there were other district initiatives affecting the schools that should not be viewed as part of the schoolwide project -- for example, the district's standardized curriculum, testing program, promotion policy, and computerized report cards.

To collect information about McMichael's approach to the schoolwide project, RBS conducted a series of open-ended interviews with McMichael's principal, program support teacher, other members of the school's leadership group, and several classroom teachers. The interviews began with two general questions: one to elicit some professional history of each informant and the second to obtain each's perspective on McMichael as a schoolwide project.

As follow-up to these interviews, RBS staff observed meetings of the leadership group and the half-day planning meetings of the entire staff of the school. When necessary, RBS staff checked its perceptions with members of the leadership group to clarify what had been discussed and how it did or did not related to McMichael as a schoolwide project.

The School, Its Staff, Students, and Community

McMichael Elementary School takes up most of a city block with its large 1964 three-story brick structure and asphalt playground, surrounded by a high fence. Across the street, a high rise housing project towers above two-story row houses. Row houses encompass the rest of the school's perimeters, except for the Kingdom Hall of Jehovah's Witnesses. A nearby railroad track, with its rumbling trains, creates a northern boundary for the neighborhood. The school is graffiti-free; in part due to the application of a barely visible substance that resists spray paint. Inside the building are wide, clean hallways arrayed with children's work and bulletin boards brightly announcing McMichael students' latest accomplishments.

McMichael's 800 students range from preschool to eighth grade. Some are as young as three, participants in the school's Head Start program or Get Set program, the latter being a 12-month day care program for parents in job training or at work. Some children at McMichael are as old as 15, as they complete the eighth grade. McMichael also has nine special education classes, including two for severely and profoundly impaired children. In addition, three afternoons a week, a group of parents from the neighborhood are in the building, attending a two-hour GED class.

The 800 children who attend this school are primarily black and poor. In 1988-89, the district identified 95.4 percent of McMichael's students as coming from low income families. Significant numbers of children lack school readiness skills. For example, this spring a nine year old child was enrolled with no previous school experience. The parents of many of McMichael's children are under twenty years of age. The number of children who attend McMichael school has been growing every year.

Of the approximately 100 adults who work in the building (e.g., teachers, instructional assistants, aides, administrators, custodians, food service), 28 are regular classroom teachers. This is a predominantly female

teaching corps and relatively new to both the profession and the building, with 67 percent having less than three years of experience at McMichael.

School staff work closely with a variety of community organizations to address problems that affect McMichael children. For example, the school sponsors various programs in school and after-school to address the community's drug problem.

History

McMichael staff describe the student population in terms of those who attended the "old" McMichael, and those who only know the "new" McMichael. Because the school is a K-8, there are a substantial number of students who remember the "old" school, when issues of safety and order were critical concerns. In those days, student work was not displayed on hallway bulletin boards for fear that it would be set on fire. The school was part of a regular police patrol, that included protection of staff cars in the parking lot. Older students from the nearby high school were often unwanted guests.

These are no longer the overriding concerns of the "new" McMichael. Staff at McMichael have been working steadily over the last four years to regain control of the school. Parents who were picketing outside the building two and a half years ago in protest over the transfer of a well-liked temporary, auxiliary principal, are now inside, for assemblies, award ceremonies, and workshops.

McMichael was invited to become a schoolwide project during the current principal's tenure, and began its first year during 1988-89. Although some staff in the building still do not recognize the term "schoolwide project," most are familiar with the procedures and processes of the project, which they have come to accept as "how things work at McMichael."

Mission and Goals

It is difficult to separate the schoolwide project's mission and goals from the vision of the "new" principal about what should happen at McMichael. Both the project and the principal arrived at nearly the same time.

McMichael staff have expressed the mission and goals of their schoolwide project in terms of two priorities. The first was to create a climate of safety and order where learning could occur, and the second was to ensure that all children experienced success as learners. As one staff person remarked, "Our first concern was the environment, and then we focused on prevention of failure and building a positive self image."

Most of the staff's efforts in year one of the project addressed the first priority. Changes were made in both the physical plant and in procedures. Changes in the facility included converting the auditorium, gym, library and lunch rooms back to their original functions, removing graffiti, and securing the building from unwanted visitors. Changes in procedures

included establishing a more orderly way for students to enter and exit the building, and reducing hallway movement and confusion. McMichael's progress on this priority was summarized by one staff person as follows, "It's nice that we can talk about an individual child with problems, rather than about a whole floor."

Subsequent staff efforts have focused on guaranteeing individual student success by grouping students differently and closely monitoring student progress. McMichael once had a record of extremely low scores compared to other schools in District 1; it was last in mathematics and second to last in reading. Staff were determined to turn this record around. Today, McMichael boasts that its first grade students are scoring higher than other first graders in District 1 and the city, and higher than the national average. The McMichael staff have been using the schoolwide project to achieve the goal of student success.

Organization of the School and the Staff

The schoolwide project encourages each school to implement its components to best meet the needs of the students and staff of that building. The district expects each school to work through a systematic, data-based planning and problem solving process to determine how it should proceed. Over the past two years, McMichael has established the following structures and roles to meet these expectations.

- During the study period, the School Advisory Committee was made up of the principal, administrative assistant, program support teacher (PST) who also serves as the school's elementary mathematics resource teacher (EMRT), other subject matter specialists (reading, social studies, science), the counselor, nurse, special education resource teacher, lead teachers from Head Start and Get Set, the school/community coordinator, and the instructional support teacher (IST) from the District 1 office. This group, which met monthly, was responsible for the overall implementation of the school improvement plan and the process of updating that plan three times during the year. The advisory committee viewed the principal as its "captain," and provided him with feedback and ideas to help him "steer the ship."

- The Pupil Support Committee was made up of the principal, counselor, nurse, lead special education teacher, the PST/EMRT, the IST, the reading resource teacher, and the teacher(s) referring the student. The committee met twice weekly to discuss individual students about whom teachers or parents were concerned.

  Students were referred to the committee for attendance, behavioral, or achievement problems. In preparation for a meeting, the teacher, counselor, reading resource teacher, and nurse assembled information on the student of concern. In addition, parents were sometimes invited to participate in the meeting to share their perspective. At a meeting, the information about the student was shared, the

committee proposed alternative explanations, identified steps to be taken, and assigned responsibilities to some committee members.

The principal credits this committee with keeping the number of special education students below 10 percent, a percentage that he believes is far below what typically would be expected in such a school. He noted that before the committee, students who were having problems were referred for psychological testing. Now, the committee conducts its own assessment and attempts alternative interventions, before requesting more formal evaluations.

- Grade-level groups were made up of the teachers from each grade in the school. Grade-level groups met during one of the five half-days designated for schoolwide project planning in 1989-90. They reviewed grade-level data to determine the extent to which their grades were contributing to the achievement of the school's milestones, identify reasons for strong and weak performance, and propose actions to improve performance.

  Teachers in each grade were scheduled for a common prep time. A few grade-level groups used this time regularly to meet and plan together; others did not.

- Standing committees have been formed to address specific schoolwide project priorities. They were led by teaching staff. During the past year, they included:

  -- Student Recognition Committee, which identified "students of the month," developed "recognition" bulletin board displays, and provided certificates to students at report card time

  -- Attendance Incentive Committee, which planned special breakfasts and luncheons for students with perfect attendance and their parents

  -- Parent Involvement Committee, which originally had assisted in the formation of a parent association and during the past year, planned parent workshops.

As a result of the schoolwide project, the school has created several new staff roles.

- During the year, the Program Support Teacher (PST) provided services throughout the school. For example, she assisted in planning staff development sessions, helped with the selection of instructional materials and the preparation of purchase orders, conferenced with teachers, and conducted student assessments, primarily in mathematics. Some of these activities were done in conjunction with the IST.

  At McMichael, the PST also served as the EMRT. As the EMRT, she played a leadership role in the analysis of student performance data

on the mathematics section of the citywide test and on the Philadelphia Mathematics Evaluation Test (PMET). She helped teachers with the PMET pacing and testing schedule, and provided them with a classroom PMET progress report. This past year, she concentrated her energies on providing direct assistance to the fourth and fifth grade classes, where test results indicated the greatest need. Once a week, she worked with half of those classes for 45 minutes, emphasizing the use of manipulatives and computers.

- The Reading Resource Teacher's responsibilities included confirming the appropriateness of reading group assignments, coordinating the administration of the citywide test and TELLS (Testing for Essential Learning and Literacy Skills), working with grade-level groups on issues related to student placement and test results, and providing classroom demonstrations. Under current consideration is the idea of reallocating resources from this position to create an additional third grade position. The proposed teacher would work with a small group of low achieving students in a transition class.

The schoolwide project has also affected the role of the school/community coordinator. Before the schoolwide project, she only served Chapter 1 students. Now, she serves all students. In addition, she now plays a key role on several of the schoolwide project committees.

Current Strategies and Activities for Achieving Its Goals

McMichael staff have initiated various strategies and activities to achieve the schoolwide project goals.

Improve School Climate

The district model, Creating Success, has been an important tool for improving the climate of McMichael. The model encourages a staff to concentrate on the early learning years and to address the problem of the significant numbers of entering students who are not able to work in grade-level material. A staff that implements this model needs to believe that with appropriate support, all of its students are capable of school success, that support is especially productive when provided in a preventive mode, that support needs to be social as well as instructional, and that students who enter second grade on level will have a high likelihood of school success.

The model's strategies include an emphasis on pre-kindergarten through grade 1 articulation; instruction based upon high expectations, student success, active student participation, multiple learning styles, the teaching of prerequisite skills; and case conferencing for students at risk.

At McMichael, it is not clear whether the model was selected because it was consistent with the school's mission and goals or whether the school's mission and goals were derived from the model. They have become closely interconnected. Staff expressed the view that the model was most helpful in the early days of the project, when the emphasis on school climate, self-esteem, and daily success was paramount.

Improve Student Achievement

To improve student achievement, McMichael's staff are pursuing multiple strategies that can be summarzed as follows: developing and refining a curriculum planning and pacing guide, intensifying instructional resources for primary grade students at risk of school failure, modifying the instructional schedule, providing remedial computer-assisted instruction in mathematics, reducing the number of special education pull-out and self-contained classes, assigning instructional assistants to high need areas, and designing appropriate staff development experiences.

McMichael Planning Guide. Although the district provides schools with curriculum guides, in the first year of the project, McMichael's staff developed a more detailed version, the McMichael Curriculum Guide. It provides a monthly pacing schedule for reading, mathematics, science, and social studies instruction and testing. Staff meeting and staff development time were set aside for grade-level groups to work on the guide. Grade-level groups periodically review and revise the guide.

Staff believed that this activity would increase consistency in planning and delivery of instruction across all classes in all grades, and would provide important support to the large numbers of new teachers. In fact, for a time, staff believed that the explicitness of the guide would supersede the need for lesson plans. Now, as the project approaches year three, the staff is reconsidering the role of lesson plans.

Transition Classes. The transition class represents one of the primary strategies that McMichael's staff is using to achieve its goals. In the first year of the project, McMichael established three of these classes, one for each of grades one, two, and three. This past year, only grades one and two had such a class. However, the principal was concerned about the high numbers of third grade children being retained; therefore, he is attempting to create an adaptation of the third grade transition class.

A transition class contains under 20 students, which is about 40 percent smaller than the typical class, and is staffed by a teacher and a full time instructional assistant. These children are considered to be at risk of school failure and are recommended for inclusion as a result of a the Pupil Support Committee's review, a previous teacher's recommendation, or as a result of being retained. As students in these classes demonstrate the ability to deal with grade-level material, they are transferred from the transition class into regular classrooms.

By way of example, the first grade transition class contained approximately nine students with no prior school experience and nine whom kindergarten teachers believed would benefit from a more intimate setting and extra help. A volunteer from the University of Pennsylvania and a staff person from the District 1 office provided additional assistance on a weekly basis. By spring, seven students have moved into regular classrooms. Six or seven of the remaining students may be held back to repeat first grade.

The staff believe that all teachers benefit from transition classes. For them, placing a small group of high need children in one setting not only guaranteed a successful experience for those students, but it also

eased the job of regular class teachers, who now dealt with less diversity. However, one staff member expressed concerns that this type of homogeneous grouping reduced the likelihood that low achieving students would gain the benefit of working with higher achieving students, and that students would be less likely to move to higher ability groups.

Cycling for Instruction. McMichael staff have instituted a procedure called "cycling" that involves scheduling reading simultaneously for all grades and classes. For example, grades 1 to 3, grades 4 to 5, and grades 6 to 8, each have a common reading time. The purpose of this scheduling was to allow for the regrouping of students for instruction according to their reading level, thereby reducing the range of reading levels any teacher had to address. During the past year, regrouping occurred, to varying degrees, within each of these grades. Although the procedure can allow for the grouping of students from different grades, cross-grade grouping has not yet occurred. First grade teachers were especially pleased with the practice, and have requested that a cycling schedule be designed for mathematics instruction.

Prescription Learning Laboratory. Schoolwide project resources were used to create the Prescription Learning Laboratory, a computer-assisted and computer-managed instructional program for students in grades four to eight, who require remedial assistance in basic skill acquisition, especially in mathematics. Small groups of eight students worked in the lab two to three times each week for 45 minute time periods. Approximately 75 students per week were in the lab. It was staffed by a paraprofessional. Staff believed that this was an efficient and effective way to deal with low achieving students.

Special Education. There was a concerted effort at McMichael to reduce the numbers of students labeled as special education, and to mainstream special education students into regular classes, thereby reducing the number of special education pullout and self-contained classes.

To reduce the number of students being labeled special education, the Pupil Support Committee (PSC) worked with teachers to find approaches for dealing with the needs of children, who traditionally would have been referred to special education. Only as a last resort is a child referred for special education assessment.

Strategies for reducing the number of self-contained and pullout special education classes have included the redesign of the special education teachers' role. During the study period, the school had five "floating" special education resource room teachers who worked with children in small groups, within regular classrooms. They worked closely with the regular teacher in identifying student needs. At the beginning of the second year of the project, all special education students (other than the severely and profoundly impaired) were assigned to regular classrooms, where they were expected to receive the majority of their instruction. However, by January, some regular teachers were feeling overwhelmed by the problems associated with these students. Consequently, many of these students were re-assigned to special education classes for part of the day, although the concept of a floating teacher still applied in some instances. In the coming year, regular teachers will be offered the option of having special

education students. If they accept, they will have a smaller class size and the in-class services of a special education resource teacher. If students spend more than 51 percent of their day in a regular classroom, they are then required to take the citywide test, and their scores become part of the school's test results profile. Therefore, McMichael's commitment to mainstream special education students for more than 51 percent of the day is, in the principal's words, "biting the bullet." McMichael intends to keep working on how best to mainstream special education students, even though this practice may bring down test scores.

Assignment of Instructional Assistants. Ten instructional assistants, five full-time and five part-time, were assigned throughout the building. They were concentrated most heavily in the lower grades where their role is to reinforce basic skills with small groups or individual students. In 1989-90, full-time assistants were assigned to two kindergarten classes and two transition classes. The other assistants were assigned to regular classroom teachers and to the EMRT and science resource teacher.

Staff Development. Formal staff development opportunities have been provided at required staff and committee meetings, during half-day planning times, and at Saturday workshops. These sessions have addressed diverse topics, such as directed reading approaches, team work, active teaching and learning, and school climate. Less formal staff development activities have been planned and implemented by the PST, IST, EMRT, and reading resource teacher, in response to individual teacher or grade-level requests. Next year, funds will be used for a staff development program on introducing an accelerated learning approach to teaching basic mathematics to young children.

Staff new to McMichael were more likely to both initiate and respond to staff development opportunities. Feedback from a staff development needs assessment form filled out in the spring indicated that staff would like increased choice and flexibility. As a result, next year teachers will choose how they wish to spend five of their ten staff development hours.

Improve Attendance

Increasing attendance rates has been a goal for McMichael, and these rates have improved slowly. Staff attributes this improvement to the combined effect of systematically monitoring student attendance rates and providing an attendance incentive program.

Systematic monitoring of student attendance was supported by the district's computerized attendance program. McMichael used the computerized data to track individual student absence rates. It followed up on frequently absent students with certified letters, calls to the home, and visits from the school/community coordinator. The school/community coordinator also alerted the PSC and the Attendance Incentive Committee if there were special problems.

The Attendance Incentive Committee established several ways to recognize the effort of students and their parents. These included: special assemblies, certificates, photographs displayed on bulletin boards, attendance banners, and class awards of movies, parties, and trips. Both the

monitoring and incentive approaches emphasized the importance of communicating with parents, letting them know when there were problems and when there were successes.

Attendance goals have also been set for staff. The principal has set a goal of 95 percent for staff attendance for next year.

Improve Parent Involvement

Parent involvement at McMichael was largely the responsibility of the school/community coordinator. Her job description indicated that her primary function is to expand parental involvement. She recruited parents for the GED class, planned parent workshops, parent teas, and regularly went on community walks, during which she knocked on the doors of houses and businesses, inviting people to visit the school. Her work was supported by the Parent Involvement Committee. Even with these efforts, expanding parent involvement remained an ongoing challenge to McMichael staff.

Summary: Effects of Being a Schoolwide Project

From the comments of McMichael's staff, the effects on McMichael Elementary School of being a schoolwide project may be summarized as follows.

- The climate has improved for students. The school is a safer, calmer, and more orderly place today. Students and parents are aware of this change. As a result, McMichael has a new problem. Students are not transferring out; instead, new students are transferring in. For example, the overall population is expected to grow by 100, with their eighth grade class of 30 this year projected to be 60 in the next. First grade classes are already being projected to grow to 30 each.

  While this growth is gratifying to the principal, the down side is that the central office uses enrollment averages over the last five years to project staffing needs. Computed this way, McMichael's numbers lead the central office to assume a decline. As a result, the school began last fall with an inadequate number of teachers, and it expects it will again experience this situation.

- Staff have begun to see the positive effects of their efforts to improve attendance. The problem of attendance has assumed a new importance for them in planning and implementation.

- The climate has improved for faculty. The teacher turnover rate has dropped significantly. Two years ago, the school could not find substitutes to fill vacant teaching positions. Today, McMichael is now turning away voluntary transfers, and is getting ready to hang out the "no vacancy" sign.

  Though many of the staff are relatively new to the school, the entire staff is beginning to work like a team.

- The school-site autonomy that has developed as a result of being a schoolwide project has inspired a new attitude of experimentation.

- The need for improved student achievement in order to maintain their autonomy is unifying the staff.

- From the staff's perspective, improvements in reading and mathematics are a result of taking a more systematic and focused look at how the school is organized for instruction, staffing patterns, teacher/student ratios, pacing of instruction, and the appropriate placement of students.

SECTION II

CURRENT INSTRUCTIONAL PRACTICE AT MCMICHAEL -- A SNAPSHOT

The second task of the study was to collect information that would suggest the current status of instructional practice in the school.

To this end, a team of educators who have worked with other Chapter 1 programs visited McMichael Elementary School on April 2 and 3. The school's principal organized the team's visit, selecting the classes the team would visit and the teachers who would be interviewed. Over the course of two days, the team visited eight classes and conducted individual, 45-minute interviews with the teachers of those classes. The eight teachers represented about one-third of the kindergarten to eighth grade classroom teachers in the building.

This section summarizes the results of the visits and the interviews. It is organized into five parts. The first provides a brief overview of the classes visited. The second summarizes the framework of research-based factors used to structure the collection of information and the methods used to collect information from the classroom visits and the teacher interviews. The third, fourth, and fifth sections summarize information collected for the student-related factors, the classroom-related factors, and the school/district-related factors, respectively.

Following the summary of information for each factor, some discussion questions are suggested. In general terms, they ask:

- To what extent do you agree with the perspective on instructional practice, presented in the framework of research-based factors?
- To what extent do the descriptions reflect instructional practices found across all classes/grades in the building?
- To what extent do the descriptions suggest practices that could benefit from further study and/or action?

Classes Visited

Table 1 provides a overview of the classes visited. They represented the following levels in McMichael Elementary School: three first grades, two second grades, a fourth, fifth and eighth grade. Eight lessons were seen in all, and included:

- a first grade whole-class mathematics lesson on greater than, less than and equal to
- a first grade mathematics lesson on telling time
- a first grade mathematics lesson on reading pictographs

- a second grade reading lesson in which students read aloud from their text, answered questions about the story, and worked on a phonics assignment in their workbook
- a second grade reading lesson that included a discussion of the story students had read
- a fourth grade reading/language arts lesson
- a fifth grade mathematics lesson that included a review of multiplication tables, and an introduction to multiplying with decimals
- an eighth grade science lesson that included a review of the concept of humidity and an introduction to the concept of the variety of clouds.

Table 1

Lessons Seen by Team During Classroom Visits

Subject / Grade	Reading/ Language Arts	Math	Science	Total Lessons
1	0	3	0	3
2	2	0	0	2
4	1	0	0	1
5	0	1	0	1
8	0	0	1	1
Total	3	4	1	8

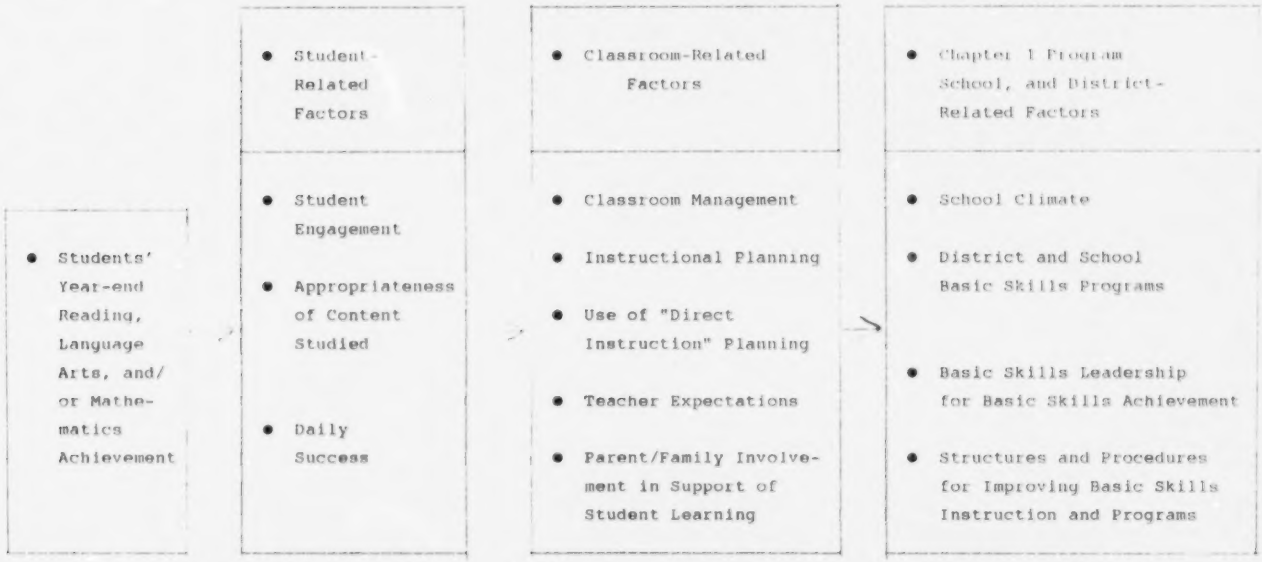
Framework of Research-Based Factors and Study Methods

This part describes the framework of research-based factors used to collect information from the teachers and classes described above. It also provides a brief description of the methods used for collecting and analyzing the data.

The Framework

Figure 1 provides an overview of the research-based factors that were used to structure the collection of information on instruction-related practices. It was developed by the designers of the Pennsylvania Chapter 1 program improvement process, known as MAGIC.

Figure 1
Framework of Research-Based Factors


Student-Related Factors
Classroom-Related Factors
Chapter 1 Program, School, and District-Related Factors
Students' Year-end Reading, Language Arts, and/or Mathematics Achievement
Student Engagement
Appropriateness of Content Studied
Daily Success
Classroom Management
Instructional Planning
Use of "Direct Instruction" Planning
Teacher Expectations
Parent/Family Involvement in Support of Student Learning
School Climate
District and School Basic Skills Programs
Basic Skills Leadership for Basic Skills Achievement
Structures and Procedures for Improving Basic Skills Instruction and Programs

The framework should be read as follows. Research suggests that students are more apt to show high levels of achievement on unit or year-end measures, if they

- are actively engaged in learning activities during a significant part of each day
- are studying content that is appropriate, given what they have learned to date and what will be assessed on unit and year-end measures
- experience a moderately high level of daily success on their learning activities.

Current research suggests that that these factors are, in turn, influenced by what happens in classrooms and what teachers plan and do:

- how well they manage their classrooms
- how they balance in their instructional planning the requirements of the curriculum, what knowledge and skills students can demonstrate, and how individual students learn best
- the extent to which they teach in a manner that reflects the "direct instruction" approach
- the extent to which they expect that all of their students can succeed and the extent to which they take steps to provide a classroom environment and instruction that are consistent with that expectation
- the extent to which they succeed in involving parents or other family members in active support of their students' learning.

Current research also suggests that what happens in classrooms and what teachers do can be influenced by the climate of the school, the structure of the school/district program, the extent to which school leadership and the school as an organization focus on improving student achievement, and the structures and procedures that help teachers improve instruction. (The latter is addressed in this part of the study; the others have been addressed earlier.)

In summary, it must be stressed that this framework provides one way of conceptualizing the interrelationship of factors that research suggests may influence students' basic skills achievement. Even though this report presents information collected by factor, it is important to keep in mind the interrelationships among the factors. For example, high levels of student engagement may have little relationship to achievement, if students are not engaged in learning appropriate content.

Methods Used

Two methods were used to collect information. To collect information about student engagement, classroom management, and instructional approach, the team visited eight classrooms for approximately 45 minute periods. MAGIC forms were used by the team to observe and record student and teacher behaviors. One member of the team scanned the class every three minutes, and used the student behavior form to note the number of students who were engaged in academic tasks, and if not engaged, whether they were in-transition between academic tasks or off-task. At the end of the class visit, that team member calculated the proportion of observed students engaged, in-transition, and off-task. (See the appendix for the observation form; see Table 2 for definitions and summary of student behaviors seen.) The other member used the teacher behavior form to record every 30 or 60 seconds whether the teacher was instructing, managing, or disciplining. If instructing, the member also noted whether the teacher was orienting, explaining/demonstrating, providing guided practice, monitoring

independent practice, or providing feedback and reinforcement related to independent practice. At the end of the visit this member calculated the proportion of times the teacher was seen exhibiting the various behaviors. (See the appendix for the observation form; see Tables 3 and 4 for definitions and summary of teacher behaviors seen.

To collect information on the other factors, the teachers were interviewed, using modified MAGIC interview forms (see appendix). Following the school visit, the team worked together to summarize the results of its eight interviews on worksheets designed for that purpose (see appendix). Then using those summaries, the team drafted, critiqued, and revised a written description of what they saw and heard for each factor. These descriptions were then edited by RBS staff and appear below.

The Status of the Student-Related Factors

The framework suggests that students' level of achievement can be predicted by the extent to which students are engaged in learning activities which address appropriate content and through which they experience a moderately high level of daily success. This part summarizes information that was collected related to these factors.

Student Engagement

Table 2 lists the eight lessons according to the level of engagement observed. The table also shows for each lesson the proportion of student behavior that was coded "in-transition" or "off-task."

The level of engagement recorded fell into the following three clusters.

- During three of the eight lessons, students were observed to be well engaged (80 to 85 percent).
- During the other four lessons, students were observed to be moderately engaged (62 to 68 percent).
- During lesson eight, students were engaged for 50 percent of the time.

There was substantial variability in student behavior among the eight lessons. Engaged behavior ranged from 50 to 80 percent. Transition behavior ranged from 1 to 29 percent. Off-task behavior ranged from 8 to 25 percent.

Discussion questions: To what extent do these patterns of student behavior generalize to all lessons taught every day? Why do students exhibit a higher level of engagement during some lessons than others? To what extent do these patterns of student behavior suggest areas in need of further study and/or action?

Table 2

Distribution of Student Behaviors
Seen During Eight Lessons
(Ranked by Level of Engagement)

Lesson Number	Engaged	In-Transition	Off-Task
1	85%	7%	8%
2	82%	1%	17%
3	80%	5%	15%
4	71%	19%	10%
5	68%	8%	24%
6	66%	15%	19%
7	62%	13%	25%
8	50%	29%	21%

Note: Lesson numbers do not refer to the lesson numbers appearing on Tables 3 and 4. They are provided only to facilitate discussion of the data on this table.

Definitions:

Engaged: Students are engaged when they are involved in or attending to instruction in reading and/or mathematics.

In-transition: Students are transition when they are "in between" or preparing for the next activity.

Off-task: Students are off-task when one of these four behaviors are observed: socializing, discipline, unoccupied/observing, and out of room.

Appropriateness of Skills Studied

The teachers were asked to show their student records and to discuss how these records reflect the relationship of the lessons' content to student's prior learning and to learning to be assessed.

With one exception, all teachers kept individual student records, using the Student Progress Record Book, supplied by the district. Many of the record books reviewed contained not only information about student performance on unit tests and citywide tests, but also on teacher-made tests and on homework assignments. The teacher not using the Student Progress Record Book reported that she relies on observation to inform her of student performance.

The structure of the record books reflected the content that the students were expected to learn, given the district's curriculum, and the content that would be assessed on the criterion mathematics tests Philadelphia Mathematics Evaluation Test (PMET) and the citywide achievement tests. The records showed which students were mastering the content and which ones were not. Most teachers were able to show how they keep records on the specific skills that individual students had mastered. However, they varied in the way they recorded mastery levels. Some used extensive notations (e.g., red circles on tests and assignments which students did not master), while others provided less detail.

In discussing the extent to which their lessons built on content previously learned, several teachers described the conflict they faced when the test performance of some students indicated non-mastery yet curriculum guidelines called for the introduction of new content. One teacher said that she tended to follow the curriculum under such circumstances. Other teachers described how this conflict is partially addressed by the cyclical nature of the math and science curriculum that allows students to re-visit previously taught concepts.

In summary, the district's curriculum, tests, and student record system seem to ensure that students address content appropriate to what will be assessed. However, for several teachers, this system sometimes encourages them to introduce new content before some students have adequately learned important prerequisites.

> Discussion question: How can teachers best resolve the conflict that they feel when the curriculum calls for the introduction of new content, yet the performance of students on assignments and tests indicates that some students are not ready for the new content?

Students' Daily Success

The framework suggests that success is a motivator and predictor of future success, especially for students at risk. For this reason, teachers were asked to estimate the proportion of their students that experienced a moderately high level of success (75 percent or more) in their daily work.

Six of the eight teachers reported that the majority of their students experienced a moderately high level of success on their assignments each day. Their estimates of what constitutes a majority of students ranged from 72-95 percent. They emphasized that their estimates did not mean that their students experienced success in every subject area each day. In contrast, two of the teachers reported that approximately 50 percent of their students experienced a moderately high level of success each day.

Teachers who reported high numbers of students experiencing high levels of success on assignments offered various explanations. One teacher described how on most days her students do not leave the room until they have done work correctly. Another teacher noted that because all of her students are good at something, they should be able to leave her room every day with a feeling of accomplishment.

Discussion question: What additional steps can be taken to help the group of students who are consistently unsuccessful in their daily work? (For information about what is currently being done, see information provided under the factor, Teacher Expectations.)

The Status of Classroom-Related Factors

The framework suggests that what teachers do can influence how engaged students become, how appropriate the content is that they study, and what level of success they experience. This part summarizes information collected concerning classroom management, instructional planning, use of alternative instructional approaches, teacher expectations, and involvement of parents and family members.

Classroom Management

One indicator of how well students and instruction are managed is the extent to which students are observed to be engaged, in-transition, and off-task (see Table 2). Another indicator is the extent to which teachers spend their time instructing, managing, and disciplining (Table 3).

Table 3 lists the eight lessons seen according to the amount of instruction observed. The table also shows for each lesson the proportion of teacher behavior that was coded "managing" and "disciplining."

The amount of instruction recorded fell into the following two clusters.

- In six of the lessons, teachers were observed instructing most of the time (79 to 87 percent). These teachers spent only a modest proportion of time setting up the lesson and managing changes in activities, and very little time disciplining.

- In the other two lessons, teachers were observed instructing 63 to 70 percent of the time. One of these teachers spent more of the remaining time managing (27 percent) than disciplining (3 person), while the other teacher spent more time disciplining (37 percent) than on management (0 time).

Table 3

Distribution of Teacher Behaviors
Seen During Eight Lessons
(Ranked by Amount of Instructional Behavior Observed)

Lesson Number	Instructional	Management	Discipline
1	94%	6%	0%
2	87%	13%	0%
3	83%	11%	6%
4	80%	20%	0%
5	80%	17%	3%
6	79%	13%	6%
7	70%	27%	3%
8	63%	0%	37%

Note: Lesson numbers do not refer to the lesson numbers appearing on Tables 2 and 4. They are provided only to facilitate discussion of the data on this table.

Definitions:

Instruction: Teachers are instructing when one of these five behaviors is observed: orienting, explaining, providing guided practice, monitoring independent practice, and providing feedback and reinforcement on independent practice.

Management: Teachers are giving and clarifying directions, passing out papers, or undertaking other tasks which organize students for an instructional activity.

Discipline: Teachers are attending to off-task student behavior -- for example, socializing or unoccupied/inattentive behavior.

All but one teacher agreed that the pattern of behavior observed is typical for most days. The dissenting teacher believed that the instruction rate of 63 percent and discipline rate of 37 percent (lesson #8) were explained by a set of unusual circumstances that included, in part, tearful children who had inadvertently dropped their plants grown in science class, an exciting trip to the library, and her attempt to teach a math lesson during the last hour of the day.

Teachers who spent most of their time instructing used a variety of methods to discourage inappropriate behaviors. For example, they established seating arrangements and grouping procedures designed to reduce disruptive behavior. Few students were disruptive during the lessons, but when necessary, they were reminded quietly, verbally, by a touch on the shoulder, by writing a name on the board, or by removing stickers on a chart.

Discussion questions: To what extent do these patterns of teacher behavior generalize to all lessons taught each day? Why are some teachers able to spend significantly more time instructing? Should the topic of classroom management be considered at staff development and grade group sessions?

Instructional Planning

The teachers were asked to describe what influenced their instructional plans, both in general and with specific reference to the class visited. They were also asked how they balanced what the curriculum required, what knowledge and skills students can demonstrate on tests, and what they knew about how individual students learned best.

The influence of the district curriculum. All eight teachers reported the District Curriculum Guide not only influenced the content of their plans, but also ensured that teachers in the same grade were covering the same content at approximately the same time. The school has also developed an adaptation of the district guide, called the McMichael Curriculum Guide that provides a detailed pacing schedule for reading, mathematics, science and social studies. Four of the eight teachers reported utilizing this guide on a consistent basis. One teacher emphasized the importance of using materials and resources beyond those suggested in the various curriculum guides.

The influence of student test results. All eight teachers reported that they used information from their own tests to identify content they needed to re-teach and students who needed extra help. Five teachers also reported using information from the citywide tests to help them make those decisions. In contrast, one teacher felt that the citywide test was not aligned to the district curriculum and therefore, did not use this assessment to plan instruction. Another teacher noted that the citywide test was not a good measure of first grade skills because it was administered orally, and therefore discounted its value for planning. One teacher cited the influence of the PMET on instructional curricula decisions. For example, her usual approach is to pretest her students on a component of the test (e.g., pictographs), teach the concept, and then test.

The influence of the way individual students learn best. When asked how they addressed the needs and learning styles of individual students, the teachers shared a variety of general strategies. These included:

- use of manipulative, hands-on materials such as clocks in math and a wet bulb thermometer in science
- use of visuals as an integral part of any instructional activity
- use of games and other motivational materials to encourage practice of skills or use of new knowledge
- use of creative dramatics as a way to keep student attention focused on lessons
- use relaxation techniques between lessons
- organizing the students into heterogeneous cooperative learning teams, where helping and copying is encouraged.

Discussion questions: How can teachers develop a common approach to using the district curriculum in planning and to dealing with the concerns of coverage and pacing? Do teachers need to have a common set of decision rules about when the information from tests requires re-teaching and when it requires them to provide or obtain special help for specific students? To what extent does each teacher have an adequate set of strategies to address the diverse ways in which students learn best?

Instructional Approaches Used

Table 4 lists the extent to which five instructional behaviors were seen during each of the lessons. The first seven lessons listed in the table reflect an emphasis on the direct instruction approach, in that teachers oriented, explained/demonstrated, or provided guided practice. In lesson eight, less than half (47 percent) of the instructional behavior observed included direct instruction. Although all teachers exhibited varying levels of direct instruction behaviors, the amount of time devoted to each varied: orienting (0 to 12 percent), explaining/demonstrating (8 to 56 percent), and providing guided practice (24 to 73 percent). The teacher of lesson 1, in which 59 percent of the time was spent providing guided practice, later explained that one of her primary goals is to encourage students "to develop independent work habits."

The eighth lesson used a different approach. In this mathematics lesson, most of the time was devoted to monitoring independent practice, and providing students with feedback and reinforcement on their work. Time was also devoted to explaining (31 percent).

Discussion questions: To what extent is the whole class, direct instruction approach used in every class, every day? If it is the instructional approach that is primarily used, should other approaches be considered/used?

Table 4

Pattern of Instructional Behaviors Seen During Eight Lessons

	Direct Behaviors				Indirect Behaviors		
Lesson Number	1. Orienting	2. Explaining	3. Providing Guided Practice	Total Direct Behaviors	4. Monitoring Independent Practice	5. Providing Feedback and Reinforcement on Independent Practice	Total Indirect Behaviors
1	0%	35%	59%	94%	0%	6%	6%
2	12%	56%	24%	92%	0%	8%	8%
3	9%	29%	53%	91%	0%	9%	9%
4	5%	33%	52%	90%	10%	0%	10%
5	4%	8%	73%	85%	15%	0%	15%
6	0%	39%	43%	82%	18%	0%	18%
7	4%	38%	38%	80%	16%	4%	20%
8	16%	31%	0%	47%	32%	21%	53%

Definitions:

1. Orienting: the teacher provides students with an overview of the lesson.
2. Explaining: the teacher demonstrates, models, explains, and/or discusses lesson content.
3. Providing guided practice: the teacher asks the students to practice the skill or apply a concept, rule, etc.
4. Monitoring independent practice: the teacher collects information about student understanding and ability to demonstrate specific skills.
5. Providing feedback and reinforcement on independent practice: the teacher gives students information on their performance, along with appropriate praise and reinforcement.

Definitions:

Direct instructional behaviors: orienting, explaining, and providing guided practice.

Indirect instructional behaviors: monitoring independent practice, and providing feedback and reinforcement on independent practice.

Note: Lesson numbers do not refer to the lesson numbers appearing on Tables 2 and 3. They are provided only to facilitate discussion of the data on this table.

Teacher Expectations

Teachers were asked about their expectations for all students to learn the content of the curriculum, higher order thinking skills, to be motivated to achieve in school, and to be successful in their daily work.

Expectation regarding the ability of all students to learn the content of the curriculum. Although most teachers expressed a belief that all students could learn the content of the district's curriculum, some also talked about the obstacles that stood in the way of their achieving that goal. First grade teachers talked about the problem of several students who are struggling with the work and will most likely repeat first grade because of their lack of previous experience in school. Other teachers talked about the problem of students who have the ability to succeed in school, but are having problems because of irregular school attendance. A third obstacle cited by one teacher, was the problem of students being assigned to inappropriate grade and reading levels.

Expectations regarding all students learning higher order thinking skills. Six of the eight teachers believed that their students could and should learn higher order skills. Of the remaining two, one was unclear as to the meaning of higher order thinking skills, and the other believed that only a few students can handle this level of instruction. Of the six who believed their students could learn higher order thinking skills, five reported incorporating higher order thinking skills into their lessons by providing opportunities through open-ended questions for making inferences and judgments, and for predicting outcomes. The most commonly cited subject areas for providing higher order thinking were reading comprehension, social studies, and science.

Expectations regarding all students being motivated to achieve in school. All eight teachers said they needed to help many of their students develop the commitment and motivation to achieve. The teachers shared strategies they used to develop student motivation.

- One teacher described how she pays extra attention to the engaged student, and thereby creates a climate where other students strive to copy this engaged behavior in hopes of getting similar attention.
- One teacher described how she routinely intersperses lessons with highly participatory activities when she senses that a lesson is not going well, and then begins the original lesson over again.
- Some teachers talked about using manipulative materials as motivational tools.
- One teacher regularly talks to students about the benefits of a good education, as a way to motivate students to try harder.

- One teacher thought her use of cooperative learning was motivational, as it ensured that all students were to help each other learn and that each student's learning could contribute to a team's success.

- Several teachers describe using games and establishing competitions.

- Finally, several teachers described the extrinsic rewards and recognition that they provided their students such as hoagies, pens, stickers, rings (frequently purchased with their own money). As one teacher said, "I work for a paycheck; my kids work for prizes."

Expectations regarding all students being successful in their daily work. All eight teachers expressed their commitment to help students be successful, in spite of the obstacles they faced. A variety of strategies were used to help unsuccessful students.

- All eight teachers indicated that they re-taught knowledge and skills that students had not mastered.

  One teacher reported that when she re-taught, she tried to modify the instruction -- that is, she did not repeat the lesson in the same form or with the same materials.

- All eight teachers reported using some form of tutoring to assist those students who needed more help learning the content of a particular lesson. Most teachers used their instructional assistants to provide tutoring. Others described the use of successful students as tutors, either by organizing their class into learning pairs or cooperative learning teams. Two teachers reported regularly spending time at recess or after school to help students who were failing.

- One teacher described having lunch with students and using that time for informal conversation and building self-esteem.

- Three teachers reported involving the child's parent in providing extra help at home.

- One teacher reported keeping children after school to complete unfinished work.

Discussion questions: Is the school most successful with students who come to McMichael having had pre-school experiences? Who attend school regularly? Who spend multi-years at McMichael?

Assuming that the answers to the above questions are affirmative, are there steps the staff can take that might more effectively address the needs of the students who have not had pre-school experiences? Who will be at the school for only a short time? Who will not attend school regularly?

To what extent does the staff hold different perspectives as to when higher order skills should be taught? If there are real differences, should the staff explore the bases for these differences and seek a common perspective?

To what extent has the staff developed shared strategies for helping students who have not developed the commitment and motivation to achieve in school and/or who are unsuccessful in their daily work? How effective are the different strategies?

Parent/Family Involvement

The teachers were asked to estimate the percentage of their parents who participated in class-related activities -- for example, attended to teacher communications, participated in parent conferences, made contributions to classroom activities. They were also asked to estimate the percentage of parents who were actively supporting their children's learning at home.

Of the five teachers asked to provide estimates concerning parent participation in class-related activities, only one teacher estimated that 55 percent or more of their parents were participants in class-related activities, while the other four teachers estimated that 40 percent or less of their parents were participants. Of the seven teachers asked to provide estimates concerning parent support for learning, three teachers estimated that 75 percent or more of their parents actively supported their children's learning, while four estimated 50 percent or less of their parents provided such support.

As part of the interview, the teachers were asked how they tried to gain parental participation and support. All seven teachers described their efforts at the beginning of the year to introduce themselves, provide information about their program, and encourage parental support. Most of the teachers reported sending home letters or descriptive materials, and inviting parents to accompany the class on field trips. Most teachers also described efforts they made to involve parents when they had a problem with a student, such as sending home notes or making telephone calls.

Some of the unique efforts teachers made to reach parents included the following.

- One teacher invited parents concerned about their child's grades to visit the classroom and see what the child was doing; however, at the time of this visit, no parent had accepted the offer.

- One teacher asks students to keep a journal describing the work they do each day. The journal is then shared with parents at each report period. In addition, this teacher sends home behavior slips reporting both good and off-task behavior each day, and asks that they be signed by the parent and returned to school the next day. If the slips are not signed for three days in a row, they are put aside to be shown to the parents at conference time. Parent/teacher conference time is also used to emphasize to parents the important role they play in the education of their child.

- One teacher provides parents with take-home instructional materials (skill packs), along with directions on how to use them with their children. This same teacher described efforts to meet informally with parents before and after school. She reported that these brief contacts gave her time to describe accomplishments, share expectations related to specific assignments, or to discuss a problem.

Discussion questions: To what extent are the estimates of parent participation and parent/family support of student learning generalizable across the school? Why are some teachers able to obtain much higher parental participation and support? How might those teachers help other teachers gain similar levels of parental participation and support?

The Status of School/District-Related Factors

The framework suggests that what teachers do can be influenced by the climate of the school, the structure of the school/district program, the extent to which school leadership focuses staff energy on the improvement of student achievement, and the structures and procedures in place for helping teachers improve instruction. The first part of this report described the priority that the school gives to the improvement of student achievement and elements of the school's climate. In discussing instructional planning, the district's curriculum and the related citywide tests were described. This section will therefore focus on the structures and procedures that are in place to help teachers improve instruction. Specifically, this section will summarize information provided by the eight teachers about staff development, cooperative teacher planning, and supervision.

Staff Development

There was considerable variability in how the eight teachers viewed the staff development provided by the district and the school. While three teachers expressed the view that staff development provided opportunities to improve instruction, three teachers saw little value in what was currently provided, and two gave the program mixed reviews (some of the sessions were viewed as concrete and directly relevant to their classes, and others of little value). Four of the eight teachers expressed a preference for increased structure for the bi-monthly school-based staff development experiences. Individual teachers reported using the following practices introduced in recent staff development activities:

- how to use the Student Progress Record Book
- implementation of the "Creating Success" instructional model
- social studies strategies
- science strategies
- the Inquirer program on using newspapers for instruction
- the "Professor B" math program.

For them, effective staff development had to provide practical ideas they could readily implement. One teacher described what she believed to be an example of an effective strategy. The reading resource teacher brought all of the teachers of one primary grade together to discuss student reading group assignments. As a result, they completely revamped their program, moved students to new groups, and were pleased with the results of this effort.

Cooperative Teacher Planning

Grade level cooperative planning is most likely to occur informally depending upon the dynamics among individual teachers. For example, first grade teachers report meeting everyday at lunch time, and occasionally on weekends where a good deal of sharing and planning may occur. Those teachers who have a common prep time with other teachers in their grade report that this time is rarely used for common planning. Although, two teachers described how they use this time occasionally for working on the McMichael Curriculum Guide. Teachers with instructional assistants report regularly setting aside time to plan with them ways to reinforce skill acquisition for individual students.

Teacher Supervision

Seven of the eight teachers identified supervision as something that the principal was required to do. One teacher had not experienced any supervision. Supervision was described most often as an informal process conducted by both the principal and the administrative assistant, whose assistance focused on managerial assistance related to instruction (e.g., grouping and seating arrangements). None of the eight teachers described supervision that was directly related to instruction, or that represented to a supervisory model applied consistently throughout the school.

Discussion questions: How can grade-level meetings be designed to support instructional improvement? How can supervision activities be designed to support instructional improvement?

SECTION III

CURRENT INSTRUCTIONAL PRACTICE FROM THE PERSPECTIVE OF A DAY IN THE LIFE OF THREE McMICHAEL STUDENTS

The third task of the study was to describe the status of instructional practices from the perspective of individual students.

RBS staff shadowed three students for one school day in April to gather this descriptive data. The school's leadership organized the shadowing visit by selecting three primary grade classes for RBS staff to visit. The decision to shadow primary grade students was based on the heavy concentration of schoolwide project resources and innovations in these grades (e.g., instructional assistants, resource teacher support, alternative grouping and time patterns).

Three RBS staff members visited McMichael Elementary School on April 24 to serve as shadowers. Upon entering their assigned classrooms, they selected the student that they would shadow. The student might have been selected because he was sitting in a good place to be observed discreetly, or because she was wearing a brightly colored shirt that would be easy to follow in a busy classroom.

This section summarizes the results of the shadowing. It is organized into five parts. The first presents the framework of questions that guided the shadowing activity. It also describes the methods used to record and analyze observations. The remaining four parts summarize information collected regarding the structure of three students' days, the instructional tasks, the student's response to the instructional tasks and student/teacher interactions.

Following each part, some discussion questions are suggested. In general terms, they ask:

- To what extent can/should the observations be generalized, beyond the experiences of these three children on this one day?
- To what extent do the observations suggest areas that might benefit from further study and/or possible action?

In reviewing the descriptions of the days each of the students experienced, it is important to keep in mind that these students were shadowed for only one day. On another day, the data could look very different, depending upon the daily schedule, the instructional tasks presented, and the patterns of interaction that developed.

Guiding Questions and Study Methods

As a way of describing the student's experience, shadowing data are discussed according to five categories. For each of these categories a set of questions was designed to guide the description of this one day in April.

The first two categories serve to describe the flow of instructional activities and instructional settings that students experienced:

- What was the structure of each student's day? For example, how much of the students' time was devoted to core subjects (e.g., reading/language arts, mathematics, social studies, science); what proportion of the day was spent on other subjects (e.g., art, music, library); how much time was spent in transition activities such as moving from class to class, changing from one subject to another, or starting up and finishing the day; how do the days each student experienced compare? What instructional formats did each student experience (e.g., presentation, recitation, discussion, guided seatwork, unguided seatwork, surrogate, testing, management)? In what kinds of instructional groups did each student participate (e.g., whole class, sub-group, individual)? With which instructors did they spend their day (e.g., regular teacher, resource teacher, instructional assistant, parent volunteer)?

The last three categories of questions reflect various conditions that might influence student motivation and learning:

- On what instructional tasks did each student work? For example, to what extent did those tasks introduce new content; to what extent did they require higher order thinking processes?

- How did students respond to the instructional tasks? For example, from the student's perspective, how clear was each task? to what extent did each task engage the student?

- How did each individual student interact with his/her teacher? For example, what types of interactions occurred; what was the affect of those interactions; in what group setting were interactions most likely to occur?

The shadowing process is based upon a method developed by the Far West Laboratory, which was used as part of its study of Chapter 1 programs (Lee & Rowan, 1986).[1] RBS staff were instructed to shadow their student from the first to the last bell of the day. They shadowed their student in all classes (including, for example, physical education and library) and during transitions between classes. They observed the nature of the transitions that occurred before and after lunch and recess.

The process requires the shadower to record two kinds of observations. One set of observations is called structured coding, and involves keeping track of a specific set of features of a lesson. These features include: the instructional focus of the lesson, the physical

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[1]Lee, G. & Rowan, B. (1986). The management and delivery of instructional services to Chapter 1 students: Case studies of twelve schools. San Francisco, CA: Far West Laboratory for Educational Research and Development.

location of the lesson, variations in grouping, group size, type of instructor, the format of the instructional activity (e.g., presentation, recitation, discussion, seatwork, work at computer, testing) and the time devoted to a lesson. These observations were used to describe the structure and the instructional context of the student's day. These are summarized in chart form in the appendix to this section. They are discussed in the next two parts of this section.

The other set of observations are focused field notes. In taking focused field notes, the shadower writes descriptions of the instructional tasks presented and the student's response to those tasks as well as descriptions of any interactions that occur between the teacher and the student being shadowed. These descriptions were summarized and coded (see Tables 10 and 11). The results of the analysis of those descriptions appear in the last three parts of this section.

In presenting the data collected by the shadowing, each student will be identified only by a letter (A, B, or C). It also compares the instructional formats, instructional groupings, and the instructors that each student experienced.

Structure of the Three Students' Days

This part presents an overview of each student's day. (A summary of each student's day in chart form appears in the appendix.) This part then compares how much time each student spent with the core subjects, other subjects, in transition, and at lunch and recess.

Overview of Each Student's Day

Student A spent all of the morning in reading/language arts activities. She spent approximately 45 minutes in a small reading group. There, she took her turn reading aloud, listened to others read their section of the story, and participated in a discussion of the story. She learned about exclamation points and blends, and was introduced to some new vocabulary words. For the remainder of the morning, she worked on blends in her phonics workbook. During the afternoon activities, she was very distracted by conversation with her friends. After lunch, she went with her class to the science room for a lesson on the life cycle of insects. From there, she and her class went to the library, where they heard two stories about fathers and love. From the library, she and her class went to social studies for a lesson about the concept of recreation. She drew a picture of a playground as a place where she would like to go for recreation. From that class, student A was dismissed to go home. In each of the afternoon classes, she was reprimanded for talking instead of listening.

Student B's morning was divided between reading and science. In reading, he participated in a discussion of a story the class had read and was introduced to some new vocabulary words. He then completed a worksheet that required him to use the new vocabulary. He listened intently to the teacher read a story. After a mid-morning recess, he listened to the class discuss the parts of a tree, and with great care, he colored his "tree game"

worksheet. After lunch, he and his classmates spent time with his teacher discussing the use of contractions. The reading resource teacher then took over the class. The students were organized into pairs, and each pair illustrated a set of vocabulary words. From reading/language arts, the student and his class went to art, where he worked on a painting and spent five minutes standing in the corner for off-task behavior. He then joined his class in the library where he listened to the librarian read several stories. He and his class were dismissed from the library.

Student C spent his morning working on reading/language arts and mathematics activities. During part of the reading/language arts period, he worked in a small group, led by the teacher, reviewing the concept of past tense. During the other part of the reading/language arts period, he was supposed to look up spelling words in the dictionary and then write sentences using those words. He spent more time teasing a friend and playing with his pencil. After a mid-morning recess, he worked steadily, but with only partial success on a mathematics worksheet that required him to do money problems involving the addition and subtraction of the values of different coins. After lunch and in physical education, he participated in aerobic exercises and learned a new dance until he was sidelined for off-task behavior. He returned with his class to his classroom, where he divided his time between entering homework assignments into his homework journal and doing a worksheet on the punctuation of sentences. At the end of the day, he reported to the physical education teacher to make up for the time that he was sidelined.

Allocation of Time

Table 5 shows how time was allocated to the core subjects (reading/language arts, mathematics, social studies, and science), the other school subjects, transitions from one activity to another and from one classroom to another, and lunch/recess.

Table 5
Distribution of Time

Student (total time shadowed)	Core Subjects (basic skills, social studies, science)	Other Subjects (physical education, art, music, library)	Transition (moving from class to class, changing content area, morning start up, finishing day)	Lunch/ recess
A (341 min.)	(178) 52%	(43) 13%	(70) 20%	(50) 15%
B (350 min.)	(190) 54%	(80) 23%	(15) 4%	(65) 19%
C (350 min.)	(190) 54%	(80) 23%	(30) 9%	(50) 14%

Note: Time is represented by minutes and percentage of the total time scheduled.

The table shows that all three students spent nearly the same amount of time on the core subjects, approximately one-half of the school day. The table also shows that student B, who had two classes in other rooms spent very little time in transition; student C, who had one class in another room, spent about twice as much time in transition than student B; and student A, who had three classes in other rooms, spent about five times as much time in transition as student B.

Table 6 shows how time allocated to the core subjects was distributed to reading/language arts, mathematics, science, and social studies.

Table 6

Distribution of Time Among the Core Subjects

Student (total time in core subjects)	Reading/Language Arts	Mathematics	Science	Social Studies
A (178 min.)	(128) 72%	--	(20) 11%	(30) 17%
B (190 min.)	(145) 76%	--	(45) 24%	
C (190 min.)	(120) 63%	(70) 37%	--	--

Note: Time is represented by minutes and percentage of total time in core subjects.

This table shows that all three students spent the majority of the time in reading/language arts activities (63 to 76 percent). Student C had the additional core subject of mathematics. Students A and B had two additional core subjects: science and social studies.

Discussion questions: To what extent does the allocation of time recorded reflect the daily allocation of time across the school year? If it does, does this allocation represent the relative importance of the various subjects?

Do the differences in how time was used (e.g., transition) suggest areas that might benefit from further study and/or possible action?

Instructional Format

Shadowers recorded when each student experienced the following instructional formats experienced during the core subject periods.

- Presentation: Shadowed student listens to and watches teacher presentations, explanations, demonstrations, and/or reading of a story.
- Recitation: Shadowed student and class respond to teacher questions and/or teacher-presented exercise.
- Discussion: Shadowed student and classmates exchange information and perspectives on a topic. They listen to each other and build off each other's comments.

- Guided Seatwork: Shadowed student practices what he/she is to learn, while being actively monitored by the teacher. These activities frequently involve the use of worksheets or workbooks. Students may work on the exercises alone, in pairs, or as a member of a small group.

- Unguided Seatwork: Shadowed student does seatwork activity that is not actively monitored by the teacher.

- Surrogate: Shadowed student receives instruction through a surrogate (e.g., microcomputer, listening center, VCR, or film).

- Testing: Shadowed student takes a test or completes an exercise that will be used to assess his/her level of learning.

- Management: Shadowed student follows management directions of teacher (e.g., waits for papers and materials being distributed, take out a book and open to a certain page, assembles materials needed for an activity, moves to form a group).

Table 7 shows the proportion of time that each student experienced the different instructional formats during the core subject periods.

Table 7

Distribution of Time of Core Subjects By Instructional Format

Student	Presentation	Recitation	Discussion	Guided Seatwork	Unguided Seatwork	Surrogate	Test	Management
A (178 min.)[a]	(10) 6%	(62) 35%	--	(96) 54%	--	--	--	(10) 6%
B (190 min.)	--	(95) 50%	--	(65) 34%	--	--	--	(30) 16%
C (190 min.)	--	(76) 40%	--	(108) 57%	--	--	--	(6) 3%

Note: Time is represented by minutes and percentage of total time in core subjects.
[a]The 101 percent total is due to rounding.

The three students spent most of their time in recitation (35 to 50 percent) and seatwork (34 to 57 percent). They experienced different proportions of time in management situations (3 to 16 percent).

Instructional Grouping

The extent to which students experienced three types of instructional groupings were recorded by the shadowers. "Whole class" refers to those situations when all the students in a class are receiving the same instruction or are engaged in the same activity. "Sub-group" refers to when the teacher or someone else is teaching a sub-group of the class, such as a small group reading lesson. "Individual" refers to when a student is being tutored or receiving instruction alone.

Table 8 shows the proportion of time during the core subject periods that each student experienced the different instructional groupings.

Table 8

Distribution of Time of Core Subjects By Instructional Grouping

Student	Whole Group	Sub-Group	Individual
A (178 min.)	(131) 74%	(47) 26%	--
B (190 min.)	(190) 100%	--	--
C (190 min.)	(166) 87%	(24) 13%	--

Note: Time is presented in minutes and percentage of total time in core subjects.

The table shows that student B worked as a member of the whole class during all of time allocated to the core subjects. Student C worked most of the time as a member of the whole class, though he was a member of a reading sub-group for 24 minutes (13 percent of the time allocated to core subjects), while student A worked three-quarters of the time as a member of the whole class and one-quarter of the time as a member of a reading sub-group. None of the students worked individually with a teacher or instructional assistant that day.

Types of Instructors

Shadowers recorded the extent to which each student worked with the regular classroom teacher, a resource teacher, an instructional assistant, or a parent volunteer.

Table 9 shows the proportion of time allocated to the core subjects that each student worked with each type of instructor.

Table 9

Distribution of Time of Core Subjects by Instructor

Student	Teacher	Resource Teacher (Reading, Math, Science, Social Studies)	Instructional Assistant	Parent Volunteer
A (178 min.)	(128) 72%	(50) 28%	--	--
B (190 min.)	(150) 79%	(40) 21%	--	--
C (190 min.)	(190) 100%	--	--	--

Note: Time is presented in minutes and percentage of total time in core subjects.

The table shows that students C spent the entire time allocated to the core subjects with his regular classroom teacher. In contrast, students A and B spent part of the time allocated to the core subjects with a resource teacher (21 to 28 percent). None of these students worked with an instructional assistant, though there were assistants working in the classes of two of the students during the reading/language arts classes.

Discussion questions: To what extent are recitation and seatwork the predominant instructional formats used? If they are, should other formats be considered? If so, how might their use be encouraged?

To what extent is treating students as members of a whole class the predominant way of grouping students for instruction? If it is, should other ways of grouping students be considered? If so, how might they be encouraged?

Instructional Tasks During the Core Subjects

This part describes the instructional tasks on which each student worked during their core subject periods. The tasks are described from two perspectives: the extent to which they introduce new content, and the extent to which they ask the student to use higher order thinking processes.

Tasks Introducing New Content

Table 10 lists the instructional tasks on which each student worked that day. Those tasks that represented opportunities for students to learn new content are noted with a "X" in the first column. The tasks that are not marked with an "X" asked student to review or practice using previously introduced content.

- Of the nine tasks that student A worked on, five involved new content. She was introduced to some new vocabulary words, she heard about the life cycle of insects and applied that knowledge, she listened to a new story, she was introduced to the concept of "recreation," and she drew a picture of a place for recreation.

- Of the ten tasks that student B worked on, two involved new content. He was introduced to new vocabulary and had an opportunity to use those words in an exercise.

- Of the nine tasks that student C worked on, none introduced new content.

Tasks Requiring Higher Order Thinking Processes

Those tasks listed on Table 10 that asked the student to use higher order thinking processes are noted with a "X" in the second column. These tasks asked students to go beyond recognizing and recalling content and to engage in such processes as analyzing, comparing, inferring, and evaluating.

Of the nine tasks that student A worked on, two required the use of higher order thinking processes.

Table 10

Characteristics of Instructional Tasks Experienced By Each Student

	New Content	Higher Order Thinking	Clarity of Task		Student Engagement		
			Clear	Not Clear	H	M	L
Student A							
1. Identify animals and write name of animal in blank (phonics worksheet)			X				X
2. Review old vocabulary words			X		X		
3. Learn new vocabulary words	X		X		X		
4. Answer question about story (recall, analysis, comparison, and inferential questions)		X	X		X		
5. Listen to T. describe life cycle of a particular insect	X		X				X
6. Determine sequence in life of an insect (worksheet)	X	X	X				X
7. Listen to story	X		X			X	
8. Participate in discussion of concept of "recreation": examples, non-examples	X		X			X	
9. Draw example of recreational place	X		X			X	
TOTALS	6/9 (67%)	2/9 (22%)	9/9 (100%)	(0%)	3/9 (33%)	1/9 (11%)	3/9 (33%)
Student B							
1. Answer questions about story (recall, analysis, comparison, and inferential questions)		X	X			X	
2. Participate in discussion of the meaning of new vocabulary words (using examples, non-examples)	X	X	X			X	
3. Use new vocabulary words by using them in the correct sentence (worksheet)	X			X			X
4. Participate in discussion reviewing the events in a story			X		X		
5. Listen to the completion of a story			X		X		
6. Participate in answering questions about story (recall, inferential questions)		X	X		X		
7. Participate in review of meaning of vocabulary words concerning parts of the tree			X			X	

*H, M, L = High, mixed, and low engagement

Table 10 (Cont'd)

	New Content	Higher Order Thinking	Clarity of Task		Student Engagement		
			Clear	Not Clear	H	M	L
8. Use color to discriminate the parts of the tree on a worksheet		X	X		X		
9. Change words to contractions (worksheet)			X		X		
10. Draw picture of vocabulary words (review)			X		X		
TOTALS	2/10 (20%)	4/10 (40%)	9/10 (90%)	1/10 (10%)	6/10 (60%)	3/10 (30%)	1/10 (10%)
Student C							
1. Write ending to incomplete sentence			X				X
2. Practice addition (worksheet)			X			X	
3. Identify synonyms in weekly spelling list			X			X	
4. Count syllables in spelling words			X			X	
5. Participate in changing reading vocabulary words from present to past tense			X			X	
6. Participate in answering questions about story (recall, inferential)		X	X		X		
7. Look up spelling words in dictionary & write definition of word in sentence			X				X
8. Solve word problems that require addition and subtraction of coins (worksheet)		X		X		X	
9. Apply rules of correct punctuation (copy sentences)				X			X
TOTALS	0/9 (0%)	2/9 (22%)	7/9 (78%)	2/9 (22%)	1/9 (11%)	5/9 (56%)	3/9 (33%)

- During sub-group reading, student A and the other students discussed recall, analysis, comparison, and inferential questions about the story that they had read.

- During a science lesson, student A completed a worksheet on the life cycle of insects, which required her to apply the new content.

Of the ten tasks that student B worked on, four asked the student to use higher order thinking processes.

- Twice during reading/language arts, student B and the rest of the class discussed recall, analysis, comparison, and inferential questions about the story that they had read.

- During reading/language arts, student B was asked to associate other words and concepts with the new vocabulary that was being introduced.

- During science, student B was asked to color an outline of a tree in a way that highlighted the tree's parts and illustrated how they relate.

Of the nine tasks that student C worked on, two asked the student to use higher order thinking processes.

- During sub-group reading, student A and the other students discussed recall, analysis, comparison, and inferential questions about the story they had read.

- During a mathematics lesson, the student worked on money word problems that required knowing the value of different coins and the processes of addition and subtraction.

Discussion questions: To what extent do/should students experience each day a mix of tasks that involve the review and application of prior content and the introduction of new content?

To what extent do/should students experience tasks that ask them to use higher order thinking processes?

Student Response to Tasks

This part describes the student's response to the instructional tasks. Response is viewed in two ways: the extent to which the student seemed to have difficulty understanding the task and the extent to which the student engaged in the task.

Clarity of Task

In the third column on Table 10, there is a notation about the extent to which students appeared to understand the task. Tasks noted as "clear" were those tasks that the student appeared to understand (e.g., did not ask any questions about how to do them, and responded to them, at least initially,

with appropriate task-related behaviors). Tasks noted as "unclear" were those about which the student asked for help, either from a fellow student or from a teacher. A task was also identified as unclear if a student felt the need to check continuously his or her work with another student or the teacher. A "*" was used if the student gave up on a task, expressing in words or behavior that "I cannot do this." Thus, this perspective uses student behavior to infer task clarity; it does not involve any judgment of how well the student actually understood and did a task. Indeed, in a few instances, a shadower noted that a student appeared to understand the task, but was, in fact, doing the task incorrectly.

Table 10 shows that students appeared to find only three tasks unclear. Student B appeared to not understand how to use new vocabulary to complete sentences on a worksheet, and student C appeared to not understand how to do the mathematics money problems and how to punctuate sentences that he was to copy from the chalkboard.

Task Engagement of Students

In the last column on Table 10, there is notation as to how each task engaged the student. A task was coded "H" for high engagement if the student attended to a task and exhibited the kinds of behaviors required for the student to complete the task. Examples of engaged behaviors are:

- reading, writing, speaking, listening, watching, drawing
- raising one's hand in response to a question; answering a question
- participating in a choral response to a task
- talking with fellow students about a task.

A task was coded "L" for low engagement if the student did not attend to task and exhibited such off-task behaviors as just sitting, socializing, acting out, and being disciplined. A task was coded "M" when a student exhibited a mix of engaged and off-task behaviors.

- Of the nine instructional tasks that student A worked on, three highly engaged her; these tasks dealt with stories and vocabulary. Of the remaining, two failed to engaged her to a significant degree: the phonics worksheet involving animal names and the tasks related to the life cycle of insects.
- Of the ten instructional tasks that student B worked on, six highly involved him: these tasks primarily related to stories and to drawing. Of the remaining tasks, only one failed to engage him to a significant degree: completing a new vocabulary worksheet.
- Of the nine tasks that student C worked on, only one highly engaged him: answering questions about a story. Of the remaining tasks, three failed to engage him to a significant degree: writing endings to sentences on a worksheet, looking up spelling words in a dictionary, and putting the correct punctuation in sentences, while copying them.

The instructional tasks that highly engaged all three of these students were listening to, reading, and discussing a story.

Discussion questions: To what extent does the pattern of student response to the instructional tasks (e.g., the extent to which students appear to understand a task and the level of student engagement) suggest areas that might benefit from further study and/or possible action?

Student/Teacher Interactions During the Core Subjects

This part describes the personal interactions that occurred between the individual student and his or her teachers during the core subject periods. It describes the types of interactions that occurred, the affect of those interactions, and the relationship between those interactions and the group context.

Types of Student/Teacher Interactions

Table 11 lists the interactions that each student had with his or her teachers. The first column notes interactions of two types: those related to the content of the instructional tasks and those related to behavior considered to be appropriate for successful completion of the task. Interactions related to task content include the teacher asking the student a direct question, the teacher providing feedback to the student on an answer given or on seatwork done. Interactions directed towards task-relevant behavior include the positive reinforcement given by the teacher to the student for appropriate behavior (e.g., contributing to a discussion, completing a worksheet, organizing on the desk materials for an exercise), or the corrective feedback given to the student for inappropriate behavior (e.g., not following directions, talking to neighbor, walking around). A third type of interaction that was looked for but not observed, was informal personal communications between the student and the teacher about subjects not directly related to school work.

Table 11 shows that during instruction on the core subjects, student B and a teacher interacted five times, three times in were relation to instructional tasks and two times in relation to student behavior. Student A and a teacher interacted eight times, six times in relation to instructional tasks and two times in relation to behavior. In dramatic contrast, student C and a teacher interacted 23 times, 14 times related to instructional tasks and 9 times in relation to student behavior.

Affect of Interactions

In the second column on Table 11, the affect of each interaction was coded: positive, neutral, or corrective.

Table 11

Individual Student/Teacher Interaction During Core Subjects

	Related to:		Affect			
	Content	Behavior	positive	neutral	corrective	Small Group
Student A						
1. positive reinforcement for correct answer	X		X			X
2. positive reinforcement for correct answer	X		X			X
3. feedback "Think again"	X			X		X
4. told answer is wrong	X				X	X
5. asked to provide a word with an "st" blend	X			X		X
6. praised for correct answer	X		X			
7. told to stop talking		X			X	
8. moved to front of class for talking		X			X	
TOTALS	6/8 (75%)	2/8 (25%)	3/8 (38%)	2/8 (25%)	3/8 (38%)	5/8 (62%)
Student B						
1. asked to answer a question about a story they read	X			X		
2. work monitored and praised by teacher	X		X			
3. is given special job (carrying books)		X	X			
4. received praise, with rest of class, for being the #1 classroom in the school, gets pretzel for "doing good work"	X		X			
5. has seat moved away from friend		X			X	
TOTALS	2/5 (60%)	2/5 (40%)	3/5 (60%)	1/5 (20%)	1/5 (20%)	-- (0%)

Table 11 (Cont'd)

	Related to:		Affect			
	Content	Behavior	positive	neutral	corrective	Small Group
Student C						
1. called on to clap syllables and receives praise for correct answer	X		X			
2. called on to change tense of word	X			X		X
3. asks teacher question about tenses, and receives answer	X			X		X
4. told to stop talking		X			X	X
5. asked question about tenses	X			X		X
6. asked to select correct vocabulary work	X			X		X
7. admonished for laughing at friend		X			X	X
8 asked recall question about story and receives "okay" for right answer	X		X			X
9. asked to write answer to syllable problem on board	X			X		
10. asked to read word aloud	X			X		
11. told he seems "upset" today, and asked to move seat		X			X	
12. asked if he is being a "tattletale"		X			X	
13. asked to explain why his work is not done		X			X	
14. asked for answer to math problem and told "very good" for correct answer	X		X			
15. reminded to behave		X			X	
16. reminded to get to work		X			X	
17. asked to show teacher his work, and then engaged in discussion about why his work is not done and what he needs to do in order to complete work properly	X				X	
18. told by teacher, "I'm waiting for you"!		X			X	
19. has work monitored by teacher	X			X		
20. called on for answer to question	X			X		
21. has name written on board for misbehaving		X			X	
22. has discussion with teacher concerning his homework book	X				X	
23. told to sit up, and keep his eyes on the blackboard		X			X	
TOTALS	13/23 (56%)	10/23 (43%)	3/23 (13%)	8/23 (33%)	12/23 (52%	7/23 (30%)

- Of student A's eight interactions with a teacher, three were positive, two were neutral, and three were corrective. Student A received positive comments for both task performance and behavior, and only one corrective comment about behavior.

- Of student B's five interactions with a teacher, three were positive, one was neutral, and one was corrective. The three positive interactions were related to instructional task performance; the two of the corrective interactions were related to behavior.

- Of student C's twenty-three interactions with a teacher, three were positive, eight were neutral, and twelve were corrective. All of the interactions related to student C's behavior were corrective.

In summary, all three students experienced the same number of positive interactions. However, student C experienced four to eight times as many corrective interactions as the other students.

Group Context

In the second column of Table 11, those interactions that occurred in the context of a sub-group are noted.

- The student who had the fewest interactions, student B, worked all day as a member of the whole class.

- All but one of the student A's interactions related to instructional tasks occurred when the student was a member of the reading sub-group.

- Approximately one third of student C's interactions with his teachers occurred during the 24 minutes he was in a reading sub-group.

In summary, being in a sub-group appears to increase the number of personal interactions that students and teachers have, particularly task-related interactions.

Discussion questions: To what extent do/should teachers and individual students interact over the course of a school day? What is the ideal balance between positive and corrective interactions? What can teachers do to achieve that balance?

SECTION IV

SOME CONCLUDING THOUGHTS

The first three sections of this report have presented highlights of what RBS staff saw and heard during their visits to McMichael Elementary School between January and June, 1990. In this section, we share some of our reflections on the information provided in those sections.

Section I suggests the nature and scope of the changes that McMichael's staff have made over the past two years. Those changes have affected school organization and staff roles; the monitoring and assessment of student progress; the problem solving processes that staff are using at school, grade, class, and student levels; and the selection of instructional resources. In year one, these changes were accompanied by staff turnovers. By the end of year two the McMichael staff appears motivated to continue and expand their improvement efforts. From RBS' perspective, the challenges for McMichael's staff for the coming year are to continue to collect the information that will help them decide which practices to continue, refine, or discontinue, and based on this information, to focus energy on those practices that appear most effective in helping them improve school performance.

Section II provides a snapshot of instructional practice at McMichael. It suggests that there are teachers on McMichael's staff who:

- develop instructional plans that balance the requirements of the district's curriculum and the ways in which their students learn best
- manage their classes efficiently, so that most of their time is devoted to instruction and most of their students' time is spent on task
- motivate their students to learn
- design and present lessons in ways that ensure that most of their students experience a moderately high level of daily success
- help students who are having difficulty attain mastery of specific knowledge and skills
- involve parents in support of the learning outcomes they are seeking.

From RBS' perspective, the challenge for McMichael, is how to use this rich resource, the knowledge and skills of these teachers, in ways that strengthen instruction throughout the school. Currently, McMichael has two under utilized vehicles that have the potential to generate increased opportunities for staff to learn from each other: grade-level groups and school-based staff development. Instruction could be strengthened by planning for a more systematic use of these two vehicles, using approaches

that build upon the concept of learning from each other. However, for such learning to affect instruction, the staff will need to have opportunities to visit each others' classrooms, and use these visits to help each other implement and assess the effectiveness of specific practices.

Section III describes the varied experiences that individual students can have on a given day. Specifically, the information in that section suggests that some students, but not others,

- experience an integrated set of lessons
- are involved in a well-balanced mix of instructional tasks -- that is, tasks that introduce new content and tasks that review or provide practice of previously introduced content, and tasks that ask students to recognize or recall content and tasks that ask students to use higher order thinking processes
- are highly engaged by those instructional tasks
- have frequent, positive interactions with their teachers
- experience lessons during which a minimum amount of time is spent on management
- experience days during which only a modest amount of time is spent in transition.

From RBS' perspective, this information challenges McMichael's staff to find ways of looking at schooling from the perspective of the individual student:

- how the school day is structured for each student
- what tasks each student undertakes, the extent to which those tasks interrelate, how engaging each task is
- the number of interactions that occur between individual students and staff each day, and the content and the affect of those interactions.

Such a perspective should help Michael's staff to pinpoint just what practices must be affected if the school is to continue to make progress in achieving its goals.

APPENDIX

Students' Daily Schedule
April 24, 1990

APPENDIX A

Student A
Daily Schedule
April 24, 1990

Start Time	Elapsed Time	Lesson[1]	Location[2]	Grouping[3]	Size	Instructor[4]	Format[5]
9:04 a.m.	16 min.	Reading/LA	Classroom	Whole Class	25	Teacher	Seatwork
9:20 a.m.	47 min.	Reading/LA	Classrom	Sub Group	12	Teacher	Recitation
10:07 a.m.	13 min.	Recess	Classroom	Whole Class	25	Other	Other
10:20 a.m.	10 min.	Reading/LA	Classroom	Whole Class	25	Teacher	Management
10:30 a.m.	40 min.	Reading/LA	Classroom	Whole Class	25	Teacher	Seatwork
11:10 a.m.	50 min.	Lunch	Other	Whole Class	25	Other	Other
12:00 p.m.	15 min.	Reading/LA	Classroom	Whole Class	22	Teacher	Seatwork
12:15 p.m.	25 min.	Transition	Classroom	Whole Class	22	Teacher	Management
12:40 p.m.	10 min.	Science	Hallway Science Resource Room	Whole Class	21	Science Tchr.	Presentation
12:50 p.m.	10 min.	Science	Science Resource Room	Whole Class	21	Science Tchr.	Seatwork
1:00 p.m.	20 min.	Transition	Classroom Hallway	Whole Class	21	Teacher	Management
1:20 p.m.	30 min.	Library	Library	Whole Class	21	Other (Librarian)	Presentation
1:50 p.m.	15 min.	Transition	Hallway	Whole Class	21	Teacher	Management
2:05 p.m.	15 min.	Social Studies	Classroom	Whole Class	21	Social Studies Tchr.	Recitation
2:20 p.m.	15 min.	Social Studies	Classroom	Whole Class	21	Social Studies Tchr.	Seatwork
2:35 p.m.	10 min.	Transition	Classroom	Whole Class	21	Teacher	Management
Total minutes: 341 min.*							
Total entries per column		15	15	15		15	15

[1] Lessons/Minutes:

Reading/LA (128 min.)
Science (20 min.)
Social Studies (30 min.)
Transition (70 min.)
Other (93 min.)

[2] Locations/Minutes:

Classroom (181 min.)
Other (100 min.)
Classroom & Hallway (60 min.)

[3] Grouping/Minutes:

Whole Class (294 min.)
Sub Group (47 min.)

[4] Instructor/Minutes:

Teacher (248 min.)
Other (93 min.)

[5] Formats/Minutes:

Presentation (40 min.)
Recitation (62 min.)
Seatwork (96 min.)
Management (80 min.)
Other (63 min.)

*Note: Observation time is nine minutes less than other students, due to later observation start up time.

Student B
Daily Schedule
April 24, 1990

Start Time	Elapsed Time	Lesson[1]	Location[2]	Grouping[3]	Size	Instructor[4]	Format[5]
8:55 a.m.	15 min.	Reading/LA	Classroom	Whole Class	28	Teacher	Management
9:10 a.m.	60 min.	Reading/LA	Classroom	Whole Class	28	Teacher	Recitation
10:10 a.m.	20 min.	Recess	Yard for Recess	Whole Class	28	Other	Play (Other)
10:35 a.m.	25 min.	Science	Classroom	Whole Class	28	Teacher	Recitation
10:30 a.m.	5 min.	Science	Classroom	Whole Class	28	Teacher	Management
11:00 a.m.	10 min.	Science	Classroom	Whole Class	28	Teacher	Seatwork
11:10 a.m.	5 min.	Science	Classroom	Whole Class	28	Teacher	Management
11:15 a.m.	45 min.	Lunch	Lunchroom	Whole Class	28	Other	Other
12:00 p.m.	5 min.	Reading/LA	Classroom	Whole Class	28	Teacher	Management
12:05 p.m.	10 min.	Reading/LA	Classroom	Whole Class	28	Teacher	Recitation
12:15 p.m.	15 min.	Reading/LA	Classroom	Whole Class	28	Teacher	Seatwork
12:30 p.m.	40 min.	Reading	Classroom	Whole Class	28	Resource Tchr.	Seatwork
1:10 p.m.	5 min.	Transition	Classroom	Whole Class	28	Teacher	Management
1:15 p.m.	17 min.	Art	Classroom	Whole Class	28	Art Teacher	Management
1:32 p.m.	16 min.	Art	Classroom	Whole Class	28	Art Teacher	Seatwork
1:48 p.m.	12 min.	Art	Classroom	Whole Class	28	Art Teacher	Management
2:00 p.m.	10 min.	Transition	Hallway	Whole Class	28	Teacher	Management
2:10 p.m.	35 min.	Library	Library	Whole Class	28	Other (Librarian)	Presentation
Total Minutes: 350 min.							
Total entries per column		15	15	15		15	15

[1] Lessons/Minutes:

Reading/LA (145 min.)
Science (45 min.)
Transition (15 min.)
Other (145 min.)

[2] Location/Minutes:

Classroom (230 min.)
Hallway (10 min.)
Library (35 min.)
Other (75 min.)

[3] Groupings/Minutes:

Whole Class (350 min.)

[4] Instructor/Minutes

Teacher (210 min.)
Resource Tchr. (40 min.)
Other (100 min.)

[5] Formats/Minutes

Presentation (35 min.)
Recitation (95 min.)
Seatwork (81 min.)
Management (74 min.)
Other (65 min.)

Student C
Daily Schedule
April 24, 1990

Start Time	Elapsed Time	Lesson[1]	Location[2]	Grouping[3]	Size	Instructor[4]	Format[5]
9:00 a.m.	10 min.	Reading/LA	Classroom	Whole Class	21	Teacher	Seatwork
9:10 a.m.	5 min.	Math	Classroom	Whole Class	21	Teacher	Seatwork
9:15 a.m.	10 min.	Reading/LA	Classroom	Whole Class	21	Teacher	Recitation
9:25 a.m.	20 min.	Math	Classroom	Whole Class	21	Teacher (Substitute)	Seatwork
9:45 a.m.	5 min.	Reading/LA	Classroom	Whole Class	21	Teacher	Recitation
9:50 a.m.	3 min.	Reading/LA	Classroom	Whole Class	21	Teacher	Management
9:53 a.m.	24 min.	Reading/LA	Classroom	Sub Group	13	Teacher	Recitation
10:17 a.m.	3 min.	Reading/LA	Classroom	Whole Class	21	Teacher	Management
10:20 a.m.	10 min.	Reading/LA	Classroom	Whole Class	21	Teacher	Seatwork
10:30 a.m.	10 min.	Recess	Outside	Whole Class	21	Other	Other
10:40 a.m.	20 min.	Reading/LA	Classroom	Whole Class	21	Teacher	Seatwork
11:00 a.m.	5 min.	Transition	Classroom	Whole Class	21	Teacher	Management
11:05 a.m.	25 min.	Math	Classroom	Whole Class	21	Teacher	Recitation
11:30 a.m.	20 min.	Math	Classroom	Whole Class	21	Teacher	Seatwork
11:50 a.m.	5 min.	Transition	Classroom	Whole Class	21	Teacher	Management
11:55 a.m.	40 min.	Lunch (Other)	Outside	Whole Class	21	Other	Lunch/Play
12:35 p.m.	40 min.	Phys. Ed.	Gym	Whole Class	21	Teacher (Phys. Ed.)	Phys. Ed
1:15 p.m.	5 min.	Transition	Hallway	Whole Class	21	Teacher	Management
1:20 p.m.	40 min.	Homework Prep.	Classroom	Whole Class	21	Teacher	Seatwork
2:00 p.m.	5 min.	Transition	Classroom	Whole Class	21	Teacher	Management
2:05 p.m.	12 min.	Reading/LA	Classroom	Whole Class	21	Teacher	Recitation
2:17 p.m.	23 min.	Reading/LA	Classroom	Whole Class	21	Teacher	Seatwork
2:40 p.m.	10 min.	Transition	Classroom	Whole Class	21	Teacher	Management
Total minutes: 350 min.							
Total entries per column		20	20	20		20	20

[1] Lessons/Minutes:

Reading/LA (120 min.)
Math (70 min.)
Transition (30 min.)
Other (130 min.)

[2] Locations/Minutes:

Classroom (260 min.)
Other (90 min.)

[3] Grouping/Minutes:

Whole Class (326 min.)
Sub Group (24 min.)

[4] Instructor/Minutes:

Teacher (300 min.)
Other (50 min.)

[5] Formats/Minutes:

Recitation (79 min.)
Seatwork (151 min.)
Management (30 min.)
Other (90 min.)